the fixation elements being secured to the lens body. In yet another embodiment of the invention, a single fixation element extends from a support post around substantially the entire peripheral edge of the lens body. In still another embodiment of the invention, a pair of substantially semi-circular fixation elements extend around substantially the entire peripheral edge of the lens body.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

In FIG. 3, the numeral **10** refers to an eye, after cataract removal by surgical procedure. Eye **10** includes a cornea **12** which merges into an opaque protective covering **14** called sclera. Behind the cornea **12** is the iris **16** which defines a central opening **18** known as the pupil. The iris **16** comprises a muscular diaphragm-like element capable of expansion and contraction to control the amount of light passed therethrough. The iris divides the internal chamber of the eye into two chambers, the anterior chamber **20** and the posterior chamber **22**. The natural crystalline lens of the eye would be located in the posterior chamber **22** adjacent the pupil **18**. After the natural lens has been surgically removed, a relatively flattened posterior capsule or membrane **24** remains. Normally, a small part of the anterior capsule also remains and is referred to generally by the reference numeral **26** in FIG. **3**. In the prior art implants, the posterior capsule **24** is not in close engagement with the lens implant and cells tend to migrate onto the posterior capsule which causes the opacification of the posterior capsule.

FIGS. **1** and **2** illustrate one form of the lens structure which is referred to generally by the reference numeral **28**. Lens **28** comprises a disc-shaped lens body **30** having a convex rear or posterior face **32** and a plano front or anterior face **34**. If desired, the front face **34** could also be of convex configuration. Fixation elements **36** and **38** are integrally formed with lens body **30** and extend from the peripheral thereof in the manner illustrated in FIG. **1**. As seen in FIG. **2**, the outer end portions of fixation elements **36** and **38** dwell in a plane forwardly of the face **34**. Although the design of the fixation element or elements varies from embodiment to embodiment, all of the fixation elements are disposed so that the outer ends thereof engage a substantial portion of the capsular equator when the lens is implanted.

FIG. **4** illustrates a modified form of the lens which is designated by the reference numeral **40**. Lens **40** includes lens body **42** which may be plano-convex or bi-convex as in lens **28**. Support post **44** extends radially outwardly from lens body **42** and has a pair of fixation elements **46** and **48** integrally formed with the support post and extending therefrom around substantially the entire peripheral edge of the lens body **42** in a spaced-apart relationship each fixation element having one free end.

FIG. **5** illustrates a lens **50** which is substantially identical to lens **40** except that the fixation elements **52** and **54** are joined or are secured to the lens body **56** at **58** and **60**.

The numeral **62** refers to a further embodiment of the lens in FIG. **5** wherein a single fixation element **64** extends from the lens body **66** so that the end **68** of the fixation element **64** terminates closely adjacent the support post **70** and thus leaving one free end of the fixation element.

FIGS. **7** and **8** illustrate yet another lens which is referred to by the reference numeral **72**. Lens **72** comprises a disc-shaped lens body **74** having a convex rear or posterior face **76** and a plano front or anterior face **78**. If desired, the anterior face **76** could also be of convex configuration. Fixation elements **80** and **82** are integrally formed with lens body **74** and are substantially semi-circular shaped in a plan view so that the fixation elements extend substantially around the entire peripheral edge of the lens as illustrated in FIG. **7**. Fixation element **80** includes support posts **84** and **86** extending from the lens body while fixation element **82** includes support posts **88** and **90** extending from the lens body. The support posts **84, 86** and **88, 90** extend anteriorly or forwardly from the lens body as illustrated in FIG. **8** so that the outer end portions of the fixation elements dwell in a plane forwardly of the face **76** as in the other embodiments. If desired, the support posts **84, 86** and **88, 90** could extend forwardly at right angles to the face **78** and thence outwardly to enable the outer end portions of the fixation elements to dwell in a plane forwardly of the face **76**.

FIG. **9** illustrates still another lens which is referred to by the reference numeral **92**. Lens **92** comprises a disc-shaped lens body **94** having a convex rear or posterior face and a plano-front or anterior face. If desired, the anterior face could also be of convex configuration. Fixation elements **96** and **98** are flexible and extend from opposite points on lens **94** as seen in the drawings. Each of the fixation elements are curved upon themselves as seen in FIG. **9** and when compressed, will extend substantially around the entire peripheral edge of the lens.

In all of the lens embodiments described hereinabove, the lens body and the fixation element or elements are preferably of unitary one-piece construction. Preferably, the lens material and the fixation elements are comprised of PMMA material. In the embodiment of FIG. **9**, the loops could be comprised of polypropylene if so desired.

Further, all of the fixation elements are designed so that fixation element or elements will engage substantially the entire capsular equator when the lens is implanted to aid in properly positioning the lens and to aid in maintaining the lens in position after implantation. In each of the lens embodiments, the convex rear face thereof engages the posterior capsule **24** to stretched the same rearwardly so that close engagement is achieved therebetween to prevent cellular migration onto the posterior capsule thereby preventing opacification of the posterior capsule.

Thus it can be seen that the invention accomplishes at least all of its stated objectives.

I claim:

1. A flexible posterior chamber lens, for implantation within an eye, comprising:

a disc-shaped lens body having a front face, a convex rear face, and an outer peripheral edge;

flexible holding means secured to and extending around substantially the entire peripheral edge of said lens body and having an outer end disposed forwardly of said convex rear face in a plane perpendicular to the optical axis of said lens body so that said holding means will engage substantially the entire capsular equator when the lens is implanted to reduce cellular migration into and the opacification of the posterior capsule;

said lens body and flexible holding means being made of PMMA;